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09/493,507	01/28/2000	Martin Franz	YO-999-599	2333

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EXAMINER
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ART UNIT	PAPER NUMBER
2654	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/493,507	Applicant(s) Franz et al.
	Examiner Daniel Abebe	Art Unit 2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Mar 11, 2002* .

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-19* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Drawings

1. The proposed drawing correction filed on 3/11/2002 has been disapproved because it is not in the form of a pen-and-ink sketch showing changes in red ink or with the changes otherwise highlighted. See MPEP § 608.02(v). The change is not in red-ink.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admittance, "Background of the invention" (Fig.1; Page 1), in view of Kuga et al. (USP 5,276,616; "Kuga").

As to claim 1, "Fig.1" shows a conventional indexing system, comprising:

a recognizer which recognizes words (Fig.1, numeral 104); and

an indexing data base for storing indexed feature-extracted information (textual information) (Fig.1, numeral 108). It is noted that the step of translating the textual information is not shown in "Fig.1". However, Kuga teaches an indexing system comprising :

a decoder which decodes/recognizes words (Fig.2, numeral 14);

an indexing storage (Fig.2, numeral 24); and

a text translator, including a text corrector, (text editor, Fig.2, 18), which improves the quality of the text, by correcting errors/mistakes made by the decoder, for entry into the indexing database (Col.16, lines 3-25; Fig.2, numeral 24), where the text appears prior to translation as string of characters of at least one word recognized by the decoder/recognizer (Figs.7, numeral 60, 62; Fig.14, 16; Col.7, lines 24-66). Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to translate the text prior to indexing in the admitted prior art, as taught by Kuga, for the purpose selecting only strings that have meaningful importance as index entries thereby improving the storage bandwidth of the index database.

As to claim 2, "Fig.1" teaches a feature extractor which transforms the words recognized by the speech recognizer into predetermined textual features (Fig.1, numeral 105), and Kuga teaches where textual feature that is recognized by the word recognizer/decoder is translated (to morpheme) for indexing (Figs. 2 and 3).

As to claim 3, the admitted conventional system discloses where the textual feature comprises morphs of words recognized by the recognizer, (Page 10, lines 10-15).

As to claim 4, the admitted conventional system discloses where the textual feature comprises stems of words recognized by the recognizer (Page 10, lines 10-15).

As to claim 5, "Fig.1" shows wherein the speech recognizer is adapted to transform the recognized words into a predetermined textual feature (Fig.1) and Kuga teaches where textual inputs are reconfigured (Figs.3, 7 and 14).

As to claim 6, "Fig.1" shows wherein the speech recognizer is adapted to provide textual input to the indexer and Kuga teaches where textual inputs are provided to the translator/entry list generator for transforming the text in to predetermined form for entry in to the indexing database (Figs.3, 7 and 14).

As to claim 7, "Fig.1" shows wherein the recognizer is a speech recognizer and the indexing database is audio indexing database.

As to claim 8, Kuga teaches where the indexing is performed on data that is automatically and hand/manually transcribed data (Fig.2; Col.4, lines 5-28).

As to claim 9, Kuga teaches a temporary storage medium for storing the text (Fig.2, numeral 20).

As to claim 10, "Fig.1" teaches a conventional indexing method, comprising the steps of:

providing a recognizer which recognizes words (Fig.1, numeral 104); and

providing an indexing data base for storing indexed feature-extracted information (textual information) (Fig.1, numeral 108). It is noted that "Fig.1" doesn't show the step of providing translating the textual information. However, Kuga teaches an indexing method comprising the steps of:

providing a decoder which decodes/recognizes words (Fig.2, numeral 14);

providing an indexing storage (Fig.2, numeral 24); and

providing a text translator/editor (Fig.2, numeral 18 and 22), which accept textual input for entry into the indexing storage (Fig.2, numeral 24), where the text appears prior to translation

as string of characters of at least one word recognized by the decoder/recognizer (Figs.7, numeral 60, 62; Fig.14, 16; Col.7, lines 24-66). The motivation for combining the two arts is same as argued in claim 1.

As to claim 11, "Fig.1" teaches providing a feature extractor which transforms the words recognized by the speech recognizer into predetermined textual features (Fig.1, numeral 105), and Kuga teaches where textual feature that is recognized by the word recognizer/decoder is translated for indexing (Fig.2).

As to claim 12, the conventional system, admitted, discloses where the textual feature comprises morphs of words recognized by the recognizer, (Page 10, lines 10-15), and transforming the recognized words to morphs is taught by Kuga (Fig.3).

As to claim 13, the conventional system, admitted by the Applicant, discloses where the textual feature comprises stems of words recognized by the recognizer (Page 10, lines 10-15), and Kuga teaches where the words recognized are transformed to stems (see for example where the text "windows" is transformed to standard entry "window") (Fig.7).

As to claim 14, "Fig.1" shows wherein the speech recognizer is adapted to transform the recognized words into a predetermined textual feature (Fig.1) and Kuga teaches where textual inputs are reconfigured (Figs.3, 7 and 14).

As to claim 15, "Fig.1" shows wherein the speech recognizer is adapted to provide textual input to the indexer and Kuga teaches where textual inputs are provided to the translator/entry

list generator for transforming the text in to predetermined form for entry in to the indexing database (Figs.3, 7 and 14).

As to claim 16, "Fig.1" shows wherein the recognizer is a speech recognizer and the indexing database is audio indexing database.

As to claim 17, Kuga teaches where the indexing is performed on data that is automatically and hand/manually transcribed data (Fig.2; Col.4, lines 5-28).

As to claim 18, Kuga teaches providing a temporary storage medium for storing the text (Fig.2, numeral 20).

As to claim 19, a program storage device, readable by a machine for storing the method for indexing text wherein the method includes the same steps as claimed/addressed in claim 10, is inherent in the conventional system that is admitted by the Applicant, in order to store instructions for executing the recognition and indexing process (Fig.1). Kuga teaches a program storage device for storing instructions to translate text for entry into index database (Fig.14, Fig.13, numeral 120 and 122).

Response to Arguments

4. Applicant's arguments filed 3/21/2002 have been fully considered but they are not persuasive. Applicant argues that Kuga does not teach correcting errors. The examiner submits that the purpose of the text editor in Kuga's art includes correcting (errors or mistakes) made by the decoder/recognizer there by improving the decoded text which will be input into the index

entry list generator, as shown in Fig.2. Further the conventional prior art admitted by the applicant teaches wherein the input text to the indexing database comprises text that is generated from speech recognition, suggesting that the input to the text editor and indexer of Kuga could include text generated from speech.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Leontiades et al. (5,909,667) teaches where text are indexed after the recognition errors in text are corrected.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Daniel Abebe whose telephone number is (703) 308-5543. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold, can be reached at (703) 305-4379. The facsimile phone number for this group is (703)872-9314.

Any inquiry of general nature or relating to the status of this application should be directed to the Technology Center 2600 Customer Service office whose telephone number is (703) 306-0377

Daniel Abebe, Patent Examiner-Art Unit 2654

May 20, 2002

MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
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